

BSC100 Building Block for Science Students

Annotated Bibliography

Student Name	Student Number
Jin Cherng Chong	33170193

Tutor

Dr Anita Murray

Source 1

Born this way, but barefoot running not all it's cracked up to be. (2012, May 23). *Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/lifestyle/born-this-way-but-barefoot-running-not-all-its-cracked-up-to-be-20120523-1z44h.html>

When it comes to barefoot running, there is no real general consensus on the downsides or the benefits. The newspaper article, "~~Born this way, but barefoot running not all it's cracked up to be~~" presents mainly arguments against barefoot running. These arguments are often linked to injuries being sustained during the transition period. However, even though the arguments seem logical, there are concerns about the credibility and insightfulness of the article.

One of the reasons why the article lacks credibility is because the distributor is the Sydney Morning Herald (SMH). SMH is a for-profit newspaper agency, and commonly with these types of distributor, they often will be more welcoming of anecdotal evidence. SMH is generally welcoming of anecdotal evidence because they often illustrate a story and therefore keeps their audience more engaged and entertained with their articles. The article "~~Born this way, but barefoot running not all it's cracked up to be~~" also uses predominately anecdotal evidence, such as Ryan Carter, Greg Harris, and Paul Langer anecdotes. The complication with these anecdotes is they each have a sample size of one, therefore the chance of the sample outcome being a fluke is likely.

The insightfulness of the article is also put in the question through the analysis of the author's own examples. In the article, the anecdote of Carter is mentioned where the author deliberately links Carter's stress fracture injury to running barefoot on grass, road and in particular the bike path. It would seem logical to discuss whether the transition of different path types had a factor in the incorrect transition to barefoot running. If the path type was a factor, then the author could have further looked into the amount of additional transition time needed when different path types are involved.

The newspaper article "~~Born this way, but barefoot running not all it's cracked up to be~~" does indeed present arguments rebuking the notion of barefoot running but the credibility and insightfulness of the article is **questioned**.

Commented [f1]: Good job!

Source 2

Hryvniak, D., Dicharry, J., & Wilder, R. (2014). Barefoot running survey: Evidence from the field. *Journal of sports and health science*, 3(2), 131-136.
doi:10.1016/j.jshs.2014.03.008

This ~~Hryvniak, Dicharry and Wilder~~ peer reviewed journal article “~~Barefoot running survey: Evidence from the field~~” utilises data from a survey study to help examine the impact of barefoot running on injuries and performance. This article discusses the current trend of reverting shoe designs to become as minimalist as possible, essentially supporting barefoot running. The article is largely considered objective but sometimes omits some aspects of the topic.

One of the reasons why the article can be considered objective is because the conclusion reached is logical. Often with bias studies, conclusions are reached based on insufficient evidence. The ~~Hryvniak, Dicharry, and Wilder~~ article references data from only one survey, making any sort of broad conclusions would be overreaching. The article’s conclusions are perfect in that it mentions how based on a single survey no cause and effect relationships can be established. Also, the conclusions just reveal trends in data. However, the issue with the article’s broad conclusions being largely inconclusive is the significance of the article is lessened.

The article also omits some aspects of the barefoot running discussion. For example, when the authors mention how injuries were caused by the sudden change from shod shoes to barefoot shoes in a short progression interval, ~~he-they~~ fails to mention and define how one successfully transitions. The inclusion of this aspect of the topic would have provided good insights. In addition, the conclusion states the need to progress slowly so that areas can adapt when transitioning to barefoot running. The issue with this conclusion is that because the author ~~s~~ fails to define or outline how to successfully transition, the idea of progressing slowly is undefined, thus making the conclusion useless.

The article “~~Barefoot running survey: Evidence from the field~~” by ~~Hryvniak, Dicharry and Wilder~~ is considered objective but at times omits some aspects of the topic. The article also successfully reaches correct conclusions on the influence of barefoot running on both injuries and ~~performance~~.

Commented [f2]: Good summary. However you’ve missed the mark with your assessment. You didn’t assess the credibility of the article. As well, you didn’t mention the bias in the survey method that biased the results towards a positive view of barefoot running.

Source 3

Jungers, L. W. (2010). Barefoot running strikes back. *Nature*, 463, 433-434.
doi.org/10.1038/463433a

The opinion piece journal article "~~Barefoot running strikes back~~" by William Jungers tries to establish the relationship between evolution and barefoot running. The conclusion reached by the article is that the mechanical technique of barefoot running supports the notion of barefoot running preventing injury and modern shoes may cause orthopaedic injuries. The main study that is referenced is Lieberman and colleague's biomechanical research and the data from this study helps to reinforce Jungers' article as being credible.

Jungers' article was incorrect in trying to establish a relationship between evolution and barefoot running. The article own conclusion states that studies should not provide opinions but only data and testable models. The irony is that Jungers perpetuates the claim that arched feet are probably linked to running barefoot and are helpful for hunting. This claim is in fact an opinion, since it hasn't been tested or supported by evidence. The inclusion of the word 'probably' reinforces the claim being an opinion as well.

The data used helps to perpetuate the notion of Jungers' article being credible. In Lieberman and colleagues' study, calculations are made in order to determine the difference in the amount of energy produced during the collision of stiff or compliant ankles. The process of calculating the amount of energy produced with collisions with different objects will always be the same. Since the process of calculating the amount of energy is always constant it improves the reliability of the data, making Jungers' article more credible

In summary, Jungers' article incorrectly establishes the relationship between barefoot running and evolution. However, Lieberman and colleague's research study is reliable, supporting the claim of Jungers' article being credible.

Commented [f3]: Good summary and assessment of credibility. However you did not assess the objectivity of the article.

Source Comparison and Conclusion

Consideration of the injury reduction, performance and aesthetics benefits of barefoot running trend is essential in the ever-increasing shoe market. This trend entails shoe designs being reverted back to their minimalist designs where little to no padding is offered. The newspaper article “Born this way, but barefoot running not all it’s cracked up to be”, Hryvniak, Dicharry and Wilder’s Journal article “Barefoot running survey: Evidence from the field,” and William Jungers’ “Barefoot running strikes back” journal article all explore the influence of barefoot running on injuries. Some of the articles are more reliable than others but all of them help shape my conclusion on barefoot running

Commented [f4]: Good comparison of the articles and development of your own position. However, your in-text referencing did not have the correct format.

Firstly, some of the articles are more reliable than others. The newspaper article “Born this way, but barefoot running not all it’s cracked up to be,” is the least reliable compared to the others. In this particular article, anecdotal evidence is the primary evidence used to support the conclusions, for instance, Paul Langer’s and Farris anecdotes (*Sydney Morning Herald*, 2012). Anecdotal evidence by experts may seem credible since they are by so-called experts, but experts can have biases and agendas too and often with anecdotes they omit or don’t even provide data that meets the scientific standard. These standards include large sample sizes and the effort to reduce outside factor. So the failure of Langer’s, Farris’s, and other anecdotes in meeting the scientific standard diminishes the reliability of TSMH article (*Sydney Morning Herald*, 2012). In contrast, Jungers (2010) journal article utilises the evidence from Libeurman and colleagues. The evidence does indeed try to reduce outside factors such as human error by making the calculation process itself constant and with little human influence (Jungers, 2010). Finally, Hryvniak, Dicharry, and Wilder’s (2014) journal article is arguably the most reliable when compared to the other two. The article and its data are from 2014, Jungers’ article is from 2010, and the newspaper article is from 2012. Not only does the Hryvniak, Dicharry and Wilder (2014) article use data that meets the scientific standard, the article and its findings are the most up to date.

Commented [f5]: Incorrect format for in-text referencing

Commented [f6]: Incorrect format for in-text referencing

Commented [f7]: Publishing date doesn’t necessarily negate the credibility of the article

Secondly, the conclusions reached for all the three articles helped me to shape my own conclusions towards barefoot running. The conclusion reached by Jungers (2010) alludes to how modern-day running shoes may cause injuries such as orthopaedic injuries and also alludes to how the mechanics of barefoot running suggest injury prevention benefits. On the other hand, the newspaper article claims that potential injury risk may arise through improper transitioning from shod to barefoot (*Sydney Morning Herald*, 2012). Lastly, Hryvniak, Dicharry, and Wilder’s (2014) journal article showed data which supported the newspaper claims and also indicates that barefoot running may alleviate running injuries. Hryvniak, Dicharry, and Wilder’s (2014) article failed to conclusively support the performance benefit claim of barefoot running as well. Therefore, my conclusion is the lack of support for performance benefits aspect of

barefoot running and the potential risk of injury during the incorrect transition outweighs any benefits.

In conclusion, Jungers' journal article "Barefoot running strikes back," TSMH newspaper article "Born this way, but barefoot running not all it's cracked up to be" and Hryvniak, Dicharry and Wilder's journal article "Barefoot running survey: Evidence from the field" assisted in influencing my conclusion on barefoot running.

Reference List

Commented [f8]: Some errors in formatting

Born this way, but barefoot running not all it's cracked up to be. (2012, May 23). *Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/lifestyle/born-this-way-but-barefoot-running-not-all-its-cracked-up-to-be-20120523-1z44h.html>

Hryvniak, D., Dicharry, J., & Wilder, R. (2014). Barefoot running survey: Evidence from the field. *Journal of sports and health science*, 3(2), 131-136.
doi:10.1016/j.jshs.2014.03.008

Jungers, L. W. (2010). Barefoot running strikes back. *Nature*, 463, 433-434.
doi.org/10.1038/463433a

	0	1	2	3	4	5	6
Sources	Not Present	Superficial overview of the source	Central claim of the source identified, content of source assessed to some degree and quality of source assessed		Central claim of the source identified, content of source assessed thoroughly and quality of source assessed		
Source 1					4		
Source 2			2.5				
Source 3				3			
Summary	Not Present	Superficial summary with no comparison between the three sources	Superficial summary with some comparison between sources	Clear summary which compares and contrasts the sources and develops a position based on this analysis with some grammatical errors	Clear summary which compares and contrasts the sources and develops a position based on this analysis with no grammatical errors	Clear in depth summary which compares and contrasts the sources, identifying weaknesses and strengths and develops a position based on this analysis, with some grammatical errors	Clear in depth summary which compares and contrasts the sources, identifying weaknesses and strengths and develops a position based on this analysis, with no grammatical errors
						5	
References	Not Present/ Major Errors	Minor errors in structure	No errors				
		1				Total	15.5 /20

REVIEW CORRECT REFRENCING BELOW TO UNDERSTAND YOUR MISTAKES:

In-text Referencing

Source 1: Newspaper Article with no Author

If citing at the end of a sentence: (*The Sydney Morning Herald*, May 23, 2012) or (Associated Press, May 23, 2012)

If citing within the text of a sentence: *The Sydney Morning Herald* (May 23, 2012) or Associated Press (May 23, 2012)

Source 2: Peer-reviewed Research Article

If citing at the end of a sentence for the first time since there are three authors: (Hryvinak, Dicharry, & Wilder, 2014)

If citing within the text of a sentence for the first time since there are three authors: Hryvinak, Dicharry, and Wilder (2014)

After first citation can use:

If citing at the end of a sentence: (Hryvinak et al. 2014)

If citing within the text of a sentence: Hryvinak et al. (2014)

Source 3: Peer-reviewed Commentary

If citing at the end of a sentence: (Jungers, 2010)

If citing within the text of a sentence: Jungers (2010)

Reference List:

Born this way, but barefoot running not all it's cracked up to be. (2012, May 23). *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/lifestyle/born-this-way-but-barefoot-running-not-all-its-cracked-up-to-be-20120523-1z44h.html>

OR

Associated Press. (2012, May 23). Born this way, but barefoot running not all it's cracked up to be. *The Sydney Morning Herald*. Retrieved from <https://www.smh.com.au/lifestyle/born-this-way-but-barefoot-running-not-all-its-cracked-up-to-be-20120523-1z44h.html>

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doi:10.1016/j.jshs.2014.03.008

DOI is optional.

Issue number (2) is optional.

Jungers, W. L. (2010). Barefoot running strikes back. *Nature*, 463(7280), 433-434.
doi: 10.1038/463433a

DOI is optional.

Issue number (7280) is optional.